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North Atlantic Right Whales (*Eubalaena glacialis*)

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Status

ESA Endangered - throughout its range

MMPA Depleted - throughout its range

CITES Appendix I - throughout its range

Taxonomy

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Cetacea

Family: Balaenidae

Genus: *Eubalaena*

Species: *glacialis*



North Atlantic right whale
(click for high-resolution image)

(*Eubalaena glacialis*)

Credit: Georgia Department of Natural Resources, Permit 15488

The [North Pacific right whale](#) (*Eubalaena japonica*) and [southern right whale](#) (*Eubalaena australis*) are other species of right whale.

Species Description

Weight: up to 70 tons (140,000 lbs; 63,500 kg)

Length: about 50 feet (15 m);
calves are about 14 feet (4.2 m) at birth

Appearance: stocky black body, with no dorsal fin, and callosities (raised patches of rough skin) on the head region

Lifespan: about 50 years, but there are few data on the longevity of right whales. There are indications that closely related species may live over 100 years.

Diet: zooplankton, including copepods, euphausiids, and cyprids

Behavior: Unlike other baleen whales, right whales are skimmers; they feed by removing prey from the water using baleen while moving with their mouth open through a patch of zooplankton.

Right whales are large baleen whales. Females are larger than males.

Distinguishing features include a stocky body, black coloration (although some have white patches on their bellies), no dorsal fin, a large head (about 1/4 of the body length), strongly bowed lower lip, and callosities (raised patches of roughened skin) on their head. Two rows of long--up to 8 feet (2.4 m)--dark baleen plates hang from their upper jaw, with about 225 plates on each side. Their tail is broad, deeply notched, and all

Did You Know?

- [NOAA proposes to extend rule reducing risk of whale ship strikes along U.S. East Coast.](#)
- Right whales are the rarest of all large whale species and among the rarest of all marine mammal species.
- There are only about 450 right whales in the North Atlantic.
- Right whales have a thick layer of blubber, so they float when dead, making them the "right" species for early whalers.



Video: Hydrophones hear right whales between Greenland and Iceland

each side. Their tail is broad, deeply notched, and all black with a smooth trailing edge.

Credit: NOAA Ocean Today and partners

Females give birth to their first calf at about 10 years old. Gestation lasts approximately 1 year. Calves are usually weaned toward the end of their first year. In the coastal waters off Georgia and northern Florida, calving occurs from December through March. (All vessels 65 feet (19.8 m) or longer must travel at 10 knots or less in this area during this calving season to [reduce the threat of ship collisions](#).)

It is believed that right whales live at least 50 years, but there are few data on the longevity of right whales. Using cross-sections of teeth is one way to age mammals, but, right whales have no teeth--only baleen. However, ear bones and, in some cases, eye lenses can be used to estimate age in right whales after they have died. There are indications that closely related species may live over 100 years.

Right whales generally feed from spring to fall, though, in certain areas, they may also feed in winter. Their primary food sources are zooplankton, including copepods, euphausiids, and cyprids. Unlike other baleen whales, right whales are skimmers; they feed by removing prey from the water using baleen while moving with their mouth open through a patch of zooplankton.

Habitat

Most known right whale nursery areas are in shallow, coastal waters.

The [International Whaling Commission](#)  has identified four categories of right whale habitats:

- Feeding areas
 - with copepod and krill densities that routinely elicit feeding behavior and are visited seasonally
- Calving areas
 - routinely used for calving and neonatal nursing
- Nursery aggregation areas
 - where nursing females feed and suckle
- Breeding locations
 - where mating behavior occurs
 - however, breeding areas are not known for any population

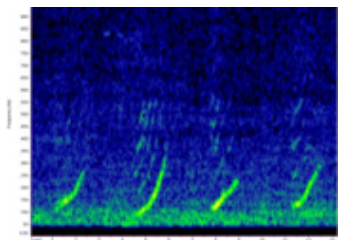
Right whales have occurred historically in all the world's oceans from temperate to subpolar latitudes. They primarily occur in coastal or shelf waters, although movements over deep waters are known. Right whales migrate to higher latitudes during spring and summer.

Critical Habitat

NMFS designated [critical habitat](#) for the *Eubalaena glacialis* in 1994 ([59 FR 28805](#)). There are two critical habitat areas in the North Atlantic:

- [Northeast U.S.](#)
- [Southeast U.S.](#)

Distribution



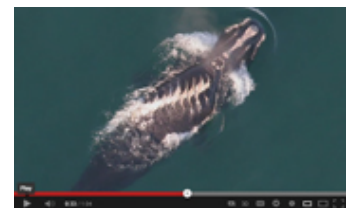
What do right whales sound like?

Credit: NOAA Northeast Fisheries Science Center



PSA Video: Slow to 10 Knots

Credit: NOAA



PSA Video: Stay 500 Yards Away

Credit: NOAA



Northeast U.S. critical habitat map

(click for larger view PDF)
Credit: NOAA



Southeast U.S. critical habitat map

(click for larger view PDF)
Credit: NOAA



North Atlantic right whales inhabit the Atlantic Ocean, particularly between 20° and 60° latitude.

For much of the year, their distribution is strongly correlated to the distribution of their prey. During winter, right whales occur in lower latitudes and coastal waters where calving takes place. However, the whereabouts of much of the population during winter remains unknown.

The majority of the western North Atlantic population range from wintering and calving areas in coastal waters off the southeastern United States to summer feeding and nursery grounds in New England waters and north to the Bay of Fundy and Scotian Shelf. NMFS identified five "areas of high use" that are key habitat areas for right whales:

- Coastal Florida and Georgia
- Great South Channel
- Massachusetts Bay and Cape Cod Bay
- Bay of Fundy
- Scotian Shelf

The eastern North Atlantic population may originally have migrated along the coast from northern Europe to the northwest coast of Africa. Historic records suggest that animals were heavily exploited by whalers from the Bay of Biscay off southern Europe and Cintra Bay off the northwestern coast of Africa, as well as off coastal Iceland and the British Isles. During the early to mid 1900s, right whales were intensely harvested in the Shetlands, Hebrides, and Ireland. Recent surveys suggest right whales no longer frequent Cintra Bay or northern European waters. Due to a lack of sightings, current distribution and migration patterns of the eastern North Atlantic right whale population are unknown.

Population Trends

It is believed the western North Atlantic population numbers about 400 individual right whales. Recent analysis of sightings data suggests a slight growth in population size, however, North Atlantic right whales remain critically endangered. Read the latest stock assessment report for [more information on the right whale population in the western North Atlantic](#).

Although precise estimates of abundance are not available for the eastern North Atlantic right whales, the population is nearly extinct, probably only numbering in the low tens of animals. It is unclear whether right whales found in the eastern North Atlantic represent a "relict" population or whether all or some of these whales are individuals from the known western North Atlantic population.

Threats

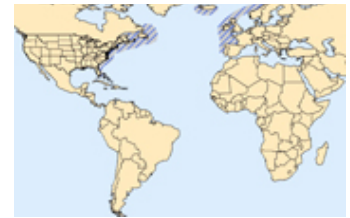
The most common human causes of serious injury and mortality of western North Atlantic right whales are:

- [ship collisions](#)
- [entanglement in fishing gear](#)

Additional threats include:

- habitat degradation
- contaminants
- climate and ecosystem change
- disturbance from whale-watching activities
- noise from industrial activities

They also face natural threats from predators such



North Atlantic Right Whale Range Map

(click for larger view PDF)
Credit: NOAA



WhaleALERT App helps mariners avoid North Atlantic right whales



Sightings in the Northeast U.S.
(click for map and date range)


Active Mandatory 10-knot Speed Zones (SMAs)

There are no mandatory speed zones in effect at this time.

They also face natural threats from predators, such as large sharks and killer whales, which may affect the population.

Conservation Efforts

Right whales were first protected by the 1931 Convention for the Regulation of Whaling, which took effect in 1935. However, neither Japan nor the Soviet Union signed this agreement, so they were theoretically free to kill right whales.

In 1949, the [International Convention for the Regulation of Whaling](#)  protected right whales from commercial whaling.

In U.S. waters, right whales were determined to be in danger of extinction in all or a significant portion of their range due to commercial over-utilization. As a result, they were listed as endangered under the Endangered Species Conservation Act in June 1970, the precursor to the ESA. The species was subsequently listed as endangered under the ESA in 1973 and, thus, designated as "depleted" under the [Marine Mammal Protection Act \(MMPA\)](#).

In 2008, NMFS listed the endangered northern right whale (*Eubalaena spp.*) as two separate, endangered species: the [North Pacific right whale \(*E. japonica*\)](#) and North Atlantic right whale (*E. glacialis*) ([73 FR 12024](#)).


NMFS has taken both regulatory and non-regulatory steps to reduce the threat of ship collisions, including:

- [Mandatory vessel speed restrictions](#) in Seasonal Management Areas
- Voluntary speed reductions in Dynamic Management Areas
- Recommended shipping routes and in an Area To Be Avoided
- Modification of international shipping lanes
- Aircraft surveys and right whale alerts
- Mandatory Ship Reporting Systems
- Outreach and Education

- Stranding response

More information on [ship strike reduction efforts](#) is available on our website.

To address entanglement in fishing gear, NMFS established the [Atlantic Large Whale Take Reduction Team](#). This team developed a plan to reduce the incidental serious injury and mortality of right whales, as well as humpback, fin, and minke whales in the South Atlantic shark gillnet fishery, the Gulf of Maine and Mid-Atlantic lobster trap/pot fishery, the Mid-Atlantic gillnet fishery, and the Gulf of Maine sink gillnet fishery.

[Federal law](#) [pdf] and [Massachusetts state law](#)  prohibit approaching a right whale closer than 500 yards unless permitted by NMFS or unless one of the limited exemptions applies.

Recovery Plan

Northern Right Whale Recovery Plan (1991):

The Northern Right Whale Recovery Team was appointed in July 1987. A Draft Recovery Plan for the Northern Right Whale (including both the North Atlantic and North Pacific right whales) was distributed for public comment in February 1990. Comments were received from Federal, state and local governments, conservation organizations, and private individuals. Appropriate comments were incorporated into the plan.

In December 1991, NMFS approved the Final Recovery Plan for the Northern Right Whale (including both the North Atlantic and North Pacific right whales). It identified known and potential factors affecting the right whale and recommended actions to reduce or eliminate impacts to the species.

NMFS published a [revised recovery plan](#) [pdf] in 2005 for right whales in the North Atlantic. (NMFS published a draft recovery plan for the North Pacific right whale in

Voluntary 10-knot Speed Zones (DMAs)*

There are no DMAs in effect at this time.

*Mariners are requested, but not required, to either avoid DMAs or travel through them at 10 knots or less.

January 2013.)

The ultimate goal of the plan is to recover the species, with an interim goal of down-listing their status from "endangered" to "threatened."

The major actions recommended in the plan are:

- Reduce or eliminate injury or mortality caused by ship collision
- Reduce or eliminate injury and mortality caused by fisheries and fishing gear
- Protect habitats essential to the survival and recovery of the species
- Minimize effects of vessel disturbance
- Continue international ban on hunting and other directed take
- Monitor the population size and trends in abundance of the species
- Maximize efforts to free entangled or stranded right whales and acquire scientific information from dead specimens

Regulatory Overview

The North Atlantic right whale (*Eubalaena glacialis*) has been listed as endangered under the [Endangered Species Act \(ESA\)](#) since 1973. It was originally listed as the "northern right whale" as endangered under the Endangered Species Conservation Act, the precursor to the ESA, in June 1970. The species is also designated as depleted under the [Marine Mammal Protection Act \(MMPA\)](#).

NMFS designated [critical habitat](#) for the *Eubalaena glacialis* in 1994 ([59 FR 28805](#)).

NMFS established [regulations to reduce the likelihood of deaths and serious injuries from ship collisions](#) to endangered North Atlantic right whales. All vessels 65 ft (19.8 m) or longer must travel at 10 knots or less in certain locations along the east coast of the U.S. at certain times of year.

In 2008, NMFS listed the endangered "northern right whale" (*Eubalaena spp.*) as two separate, endangered species: the [North Pacific right whale \(*E. japonica*\)](#) and North Atlantic right whale (*E. glacialis*) ([73 FR 12024](#)).

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
Proposed Rule To Eliminate the Expiration Date Contained in the Rule To Reduce the Threat of Ship Collisions With North Atlantic Right Whales	78 FR 34024	06/06/2013
5-year Review of North Atlantic right whale [pdf]		08/2012
NMFS Initiates 5-year review of North Atlantic and North Pacific right whales	77 FR 16538	03/21/2012



The Kids' Times: Right Whale
[pdf]
Credit: NOAA



North Atlantic Right Whale
(*Eubalaena glacialis*)
Credit: Georgia Department of Natural Resources (GADNR), Permit 15488



North Atlantic Right Whales
(*Eubalaena glacialis*)
Credit: NOAA



North Atlantic Right Whale
(*Eubalaena glacialis*)
Credit: NOAA Northeast Fisheries Science Center

Findings on petition to revise critical habitat	75 FR 61690	10/06/2010
Final Rule To Implement Speed Restrictions to Reduce the Threat of Ship Collisions With North Atlantic Right Whales	73 FR 60173	10/10/2008
ESA Listing Rule to List North Atlantic and North Pacific Right Whales as Separate Species (previously listed as "Northern Right Whales")	73 FR 12024	03/06/2008
Status Review: Right Whales in the North Atlantic and North Pacific Oceans	n/a	12/2006
Recovery Plan (as revised in 2005)	70 FR 32293	06/02/2005
Federal Regulations Governing the Approach to North Atlantic Right Whales	69 FR 69536	11/30/2004
Critical Habitat Designation: North Atlantic	59 FR 28805	06/03/1994
ESA Listing Rule (Northern Right Whales)	35 FR 18319	12/02/1970
Stock Assessment Reports	n/a	various

More Information

- [An Assessment of the Final Rule to Implement Vessel Speed Restrictions to Reduce the Threat of Vessel Collisions with North Atlantic Right Whales](#) [pdf] (NMFS-OPR-48)
- [Reducing Ship Strikes / Mandatory Ship Reporting \(MSR\)](#)
- [Atlantic Large Whale Take Reduction](#)
- [Kids' Times: Right Whale](#) [pdf]
- [Right Whale Sightings](#) (Northeast)
- [U.S. Fish & Wildlife Service Right Whale Species Profile](#)
- [Study reveals how fishing gear can cause slow death of whales](#) ❌
- Best, PB, Bannister, JL, Brownell Jr, RL and Donovan, GP, eds. 2001 ["Right Whales: Worldwide Status."](#) ❌ *The Journal of Cetacean Research and Management* (Special Issue): 2. Available from the International Whaling Commission.

Updated: August 27, 2013

